

WHAT IS CLAIMED IS:

1. A method of backing up storage regions of a disk array in a computer system having a computer and said disk array that provides said storage regions used by said computer as an external storage, comprising the steps of:

transmitting from said computer to said disk array a backup command accompanied by information about a first storage region having stored therein data to be backed up within said disk array and information about a second storage region into which said data to be backed up is to be stored as backup data within said disk array;

backing up said data of said first storage region into said second storage region by said disk array in response to said command;

sending from said computer to said disk array at least said information about said second storage region and information about backup of said first storage region; and

storing, by said disk array, at least said information about said second storage region and said information about backup of said first storage region sent as above into a storage region different from said second storage region within said disk array so that both said information can be stored as management information for said backup data, and to be associated with said backup data.

2. A method of backing up according to claim 1, wherein said computer orders said disk array to acquire a list of backup destination accompanied by said information about said first storage region, said disk array responds to said order to send to said computer information about a storage region available as a backup data region for said first storage region, and said computer sends to said disk array said information about said second storage region determined on the basis of said transmitted information.

3. A method of backing up according to claim 1, wherein said computer stores information of identification about the use of a data copy function of said disk array, said information about said first storage region, and information about said second storage region at each time of backup processing, and sends to said disk array said information about said second storage region determined on the basis of said information of said identification of said use of said data copy function and said information about said first storage region.

4. A method of backing up according to claim 1, wherein said computer orders said disk array to acquire said information about said backup stored in said different storage region, accompanied by information about said different storage region, said disk array responds to said order to send to said computer said information about said backup stored in said different

storage region, and said computer stores said received information about said backup.

5. A method of backing up according to claim 1, wherein said computer sends to said disk array a command to delete said information about said backup stored in said different storage region, accompanied by said information about said different storage region, and said disk array responds to said command to delete said information about said backup stored in said different storage region.

6. A method of backing up according to claim 1, wherein said process of backing up said data of said first storage region into said second storage region by said disk array is made by means of either data mirror or snapshot.

7. A method of backing up according to claim 1, further comprising the steps of:

sending from said computer to said disk array a command to copy said backup data accompanied by information of a third storage region; and

copying by said disk array said stored contents from said second storage region to said third storage region in response to said command, and storing said management information in a storage region different from said third storage region within said disk array so that it can be associated with data copied.

8. A method of backing up according to claim 1,

further comprising the steps of:

sending from said computer to said disk array a command to copy said backup data accompanied by information about a third storage region within a disk array different from said disk array;

transmitting said data of said second storage region, said information about said third storage region and said management information from said disk array to said different disk array in response to said command; and

storing said data of said second storage region received in said third storage region, and said management information received in a storage region different from said third storage region within said different disk array by said different disk array on the basis of said information about said third storage region so that said management information received can be stored in association with said data stored in said third storage region.

9. A method of backing up storage regions of a disk array in a computer system having a computer and said disk array that provides said storage regions used by said computer as an external storage, comprising the steps of:

sending from said computer to said disk array a command to backup data accompanied by information about a first storage region of said disk array in which said data to be backed up is stored, information

about a second storage region of said disk array into which said data to be backed up is backed up as backup data, and information about said backup of said first storage region; and

backing up said data of said first storage region into said second storage region in response to said command, and storing at least said information about said second storage region and said information about said backup of said first storage region as management information for said backup data in a storage region different from said second storage region within said disk array so that said management information can be recorded in association with said backup data.

10. A disk array system comprising:

a first storage region used as an external storage by a computer;

a second storage region for storing management information for said first storage region;

means for making said first storage region and said second storage region be associated with each other on the basis of a command from said computer; and

means for storing information about said first storage region and information received from said computer in said second storage means.

11. A disk array system according to claim 10, further comprising:

means for receiving said information about

said first storage region from said computer; and

means for transmitting the content of said second storage region corresponding to said first storage region to said computer on the basis of said received information about said first storage region.

12. A disk array system for providing storage regions used by a computer as external storage, comprising:

means for backing up data of a first storage region into a second storage region in response to a command to backup accompanied by information about said first storage region of said disk array in which said data to be backed up is stored, and information about said second storage region of said disk array into which said data to be backed up is stored as backup data, said data and said accompanying information being sent from said computer; and

means for storing at least said information about said second storage region and said information about the backup of said first storage region sent as management information for said backup data from said computer in a storage region different from said second storage region within said disk array on the basis of at least said information about said second storage region and said information about said backup of said first storage region so that said management information can be stored in association with said backup data.

13. A disk array system according to claim 12,  
further comprising:

means for copying the content of said second storage region into a third storage region in response to a command to copy said backup data, accompanied by information about said third storage region, sent from said computer; and

means for storing said management information into a storage region different from said third storage region within said disk array so that it can be associated with said copied data.